Wireless Digital Microscope

WiA500X（WiFi）

User Manual

（English）

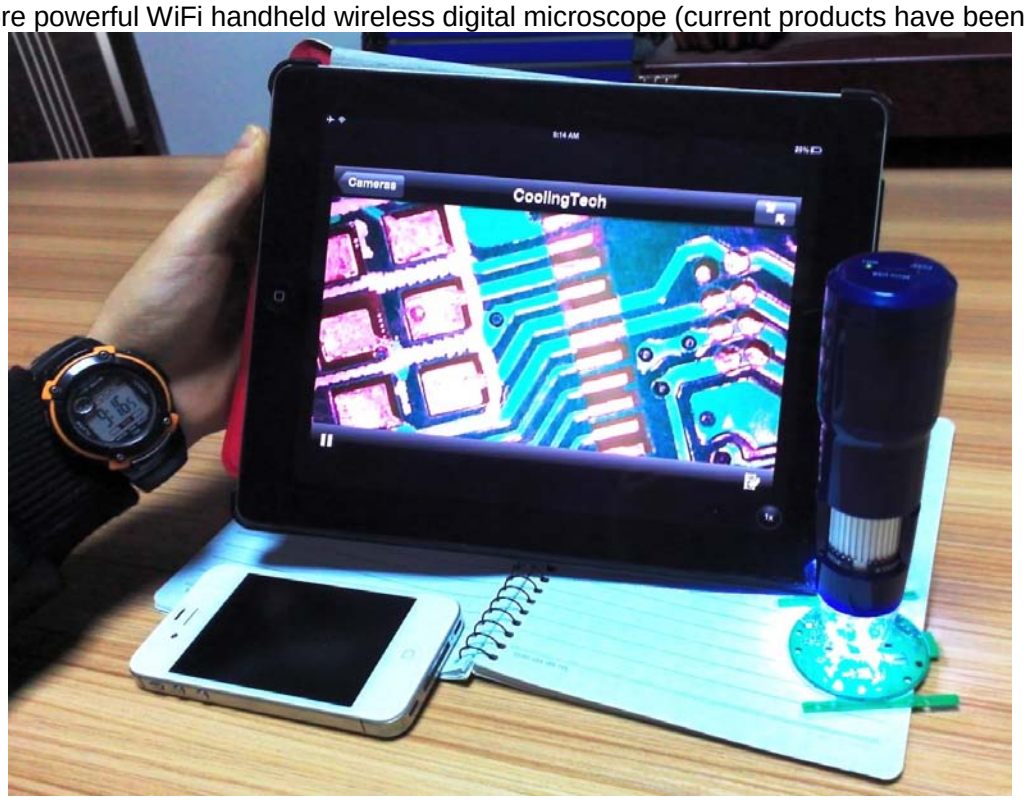
Thank you for purchasing our WiA500X Wireless Digital Microscope, makes up the limitation of distance can be used in a range within 10 to 60 meters. It is a perfect match with IOS mobile device (iPad, iPhone,iPod) and android mobile device (android tablet PC, android mobile phone). Please read below manual to get more detail about the microscope and follow the operation instructions.

Products are widely used:
Education / research institutes, antique calligraphy enthusiasts, industrial inspection departments

Display terminal:
Portable Devices: which have WIFI signal Tablet PC and mobile phone

Product selling point:
1. Handheld portable , easy to carry, without time or space constraints and non-portable devices constraints
2. display pixels high, the radio transmission, the terminal displays an image synchronized with the actual measured
3. in the microscope industry, the world's first wireless WIFI data connection, and the display terminal is the signal with WIFI Tablet PC and mobile phone
4. If the built-in battery is no electricity, you can use the mobile power charging. CoolingTech microscope is the world's first who use the mobile charging technology companies to supply the microscope charging

Since 2007 the Company's product sales in the domestic market since, USB Handheld Digital Microscope has been a "new technology, easy operation, ultra-clear, they carry" and other features, the majority of clients. Products for its professional, practical supplement to conventional microscopic detection equipment detects deficiencies in the field, greatly simplifying the customer workflow, enhance work efficiency. Following the launch of 30W pixels wired USB microscope; 200W pixels wired USB microscope series, our factory will plant the successful launch in 2013 a new generation of more powerful WiFi handheld wireless digital microscope (current products have been officially listed).



WiA500X wired wireless digital microscope digital microscope to make up the distance limitations of space can be 10 to 60 meters range, the IOS system, tablet and mobile phone (such as IPad and IPhone, IPod), Andriod tablet and mobile phone on the system to use, very convenience. WiA500X 2.4 GHz wireless handheld digital microscope with rotating focusing design, design 10-500 times magnification , 30

/ 1300000 industrial grade ultra-high definition pixel , using internationally accepted standards IEEE 802.11 WIFI , Display terminal using Apple and Android mobile devices (phones, tablets), you can shoot an image microscopic world.

For more details about this product, please be patient to read the following related product introduction, use, precautions.

a. To ensure the life time of the product , please first use this product time when the first fully charged , the red indicator light when charging , fully charged, the red indicator light goes out naturally , Reference to the charging time of 3 hours 30 minutes.

b. supporting the use of this product and a dedicated power adapter charging cable charging.

c. When the product Internal Battery is no electricity, Appears the following phenomena:

1. green light will not blink, and it will not find the WiFi network name, such as "CoolingTech_WiFi_ No. (For Example:

CoolingTech_WiFi_8; CoolingTech_WiFi_168; CoolingTech_WiFi_9998;"

2. Locate the WiFi network name, or connected to the network, but the displayed image or video is like a blank screen;

If the above phenomenon, please charge it in time to ensure that you can work or study.

Product description catalog

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This product and similar products in the world after comparing the performance advantages：

a. **This product does not require a USB cable to connect bulky desktop or laptop, truly portable, with Android Android system products (tablet, phone) or IOS System Series (IPhone, IPad,IPod) as a display terminal, the implant our research and development of software that can normally observe the measured object, truly portable.**

b. **No need fixed WiFi wireless LAN router provides space to use, WiA500X you without time and space constraints, anytime, and truly anywhere want to see can be observed object.**

c. **The same small area supports multiple simultaneous users independently of each other without disturbing each other. Supports up to 1,500 people in the same area used, independently of each; CoolingTech Microscope Have global leader in technology.**

d. **Products to increase dedicated charging adapter and data cable accessories**

e. **If the built-in battery is no electricity, you can use the mobile power charging. CoolingTech microscope is the world's first who use the mobile charging technology companies to supply the microscope charging**

Wireless Digital Microscope wide range of applications, mainly in the following aspects.

Rich Colorful Applications

一、**Industrial Inspection**：

Electronics manufacturing (IC surface inspection, semiconductor, SMT, PCB circuit boards, TFT-LCD/LED etc.)

Abrasives Industry (abrasive galvanic corrosion, wear, defects, etc.)

Precision machinery industry (precision parts defects, cracks, and data measurement and analysis, etc.)

Printing industry (printing quality inspection, observation and analysis of inks, printing equipment, commissioning)

Textile industry (quality control testing, etc.)

Metallic materials, composites, plastics industry, glass-ceramic materials, printing images, watch gears, testing, leather resin inspection, welding and cutting checks, dust detection and so on.

二、**Scientific identification:** identification of criminal forensics, document identification, identification, identification jewelry, antiques appraisal repair

三、**Beauty:** the skin clean view, skin care view, the hair root view, such as skin irritation view

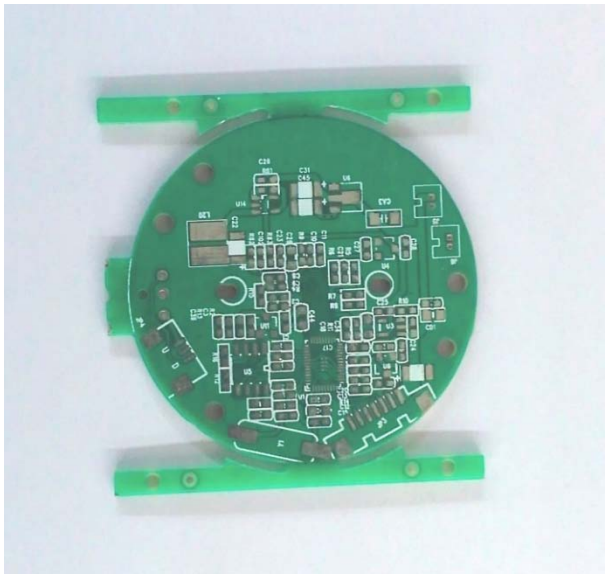
四、**Academic research:** research institutions, agroforestry research, geology research, paleontology research specimens

五、**Digital teaching:** to facilitate students class, after class better observation of nature biology, microbiological observation, observing flora and fauna such as sliced

六、**Antiques, artifacts recognition applications:** antiques, ceramics and other artifacts can be on-site observation and identification

WiA500X Portable Handheld Wireless WiFi microscope, PCB circuit board identification applications:

Boards need to be applied to a microscope to detect several working level, which includes many types of working level, such as the signal layer, protective layer, silkscreen inner layer, a variety of aspects related presentations are as follows:



(1) signal layer : mainly used to place the components or wiring . Protel DXP usually contains 30 intermediate layer, that MID Layer1 ~ MID Layer30, the intermediate layer is used to decorate the signal line , the top and bottom to place components or copper .
(2) Protective Layer : mainly used to ensure that the board does not need to be tinned tinned place to ensure that the circuit board reliability. Top Paste and Bottom Paste which were the top and bottom solder solder resist layer ; Top Solder and Bottom Solder paste , respectively paste the protective layer and the underlying protective layer .
(3) silkscreen layer : mainly used in printed circuit board components serial number, production number , company name and so on.
(4) inner layer : mainly used as a signal wiring layer , Protel DXP CPC contains 16 internal layers .
(5) Other layers : including four types of layers .
Drill Guide (borehole orientation layer) : mainly used in printed circuit board drilling locations.
Keep-Out Layer (prohibition wiring layer) : mainly used for drawing electrical circuit board border .
Drill Drawing (drill drawing layer) : mainly used to set the drill shape.
Multi-Layer (layers) : mainly used to set the multi-faceted layers .

Handheld wireless microscope WiA500x observation circuit board diagram

WiA500X portable handheld wireless WiFi microscope detects the circuit board is very important, both for observing the protective layer board tin defects, or for observing the process of drilling, WiA500X portable wireless WiFi portable microscope for its design , real-time on the assembly line in the factory at any time to achieve sampling can be carried out raids at the factory, you can live in the negotiations to

achieve the value of checkers and other real applications, real-time implementation factory multiplayer common observation, discussion and communication for synchronization.

Handheld Portable Wireless WiFi microscope WiA500X, text 、Painting and calligraphy Identification Identification Application:

"The wise Invincible" story in the end of Jupiter with a magnifying glass identification Gu Kai calligraphy and painting

WiFi wireless handheld microscope WiA500X be very quick and easy identification of the authenticity of paintings artifacts, such as the identification of hand-painted or printed, high imitation, which start at CoolingTech microscopic ink painting with natural rice paper together, which under the microscope ink will see delicate and soft, the longer the era of its penetration and pastel paintings will feel more natural.

Handheld Portable Wireless WiFi microscope WiA500X show printing ink rough renderings

Through the figure , we can easily see that shooting portable wireless WiFi microscope WiA500X print or high imitation goods is granulated ; while hand- painted calligraphy ink under a microscope, it is a massive , look delicate and soft and clear seen to be glued to the surface of the rice paper traces ; experienced paintings enthusiasts, see the information under the microscope , but also to determine the age of paintings , from which the hands of masters and so on. Printing quality is good or bad at a glance , the scene can be seen ; while lines through the paper by showing the merits of paper quality image analysis .

Traditional desktop microscope or instrument , because of its bulky , inconvenient to get the shooting scene, or the scene negotiations , or other auction site , handheld wireless WiFi microscope WiA200X and WiA500X, because of their characteristics can be realized ubiquitous portable up , because most phones

now have a very high clear display screen , anytime, anywhere to achieve physical observation and measurement, through WiA500X displayed image can be used for analysis to determine whether that you want the scene of paintings or antiques , and can achieve on-site multiplayer discussion , the microscopic details of the archive preservation.

Wireless Handheld microscope WiA500X support IOS and Andriod bidirectional output, observe printed products

Thus, the relative printing class security identification, portable microscope WiA500X identity has been successfully applied to the authenticity of identification, security identification tobacco packaging, insulation materials identification, automotive coatings recognition, traffic accidents lattice site inspection, field data collection and other fire-site office and mobile law enforcement to go.

Handheld wireless microscope observation bracelet WiA500X

Handheld Portable Wireless WiFi microscope WiA500X, antiques , pottery, artifacts recognition 、 applications :

And relatively antiques, ceramics and other artifacts , because the appearance of the diversity and

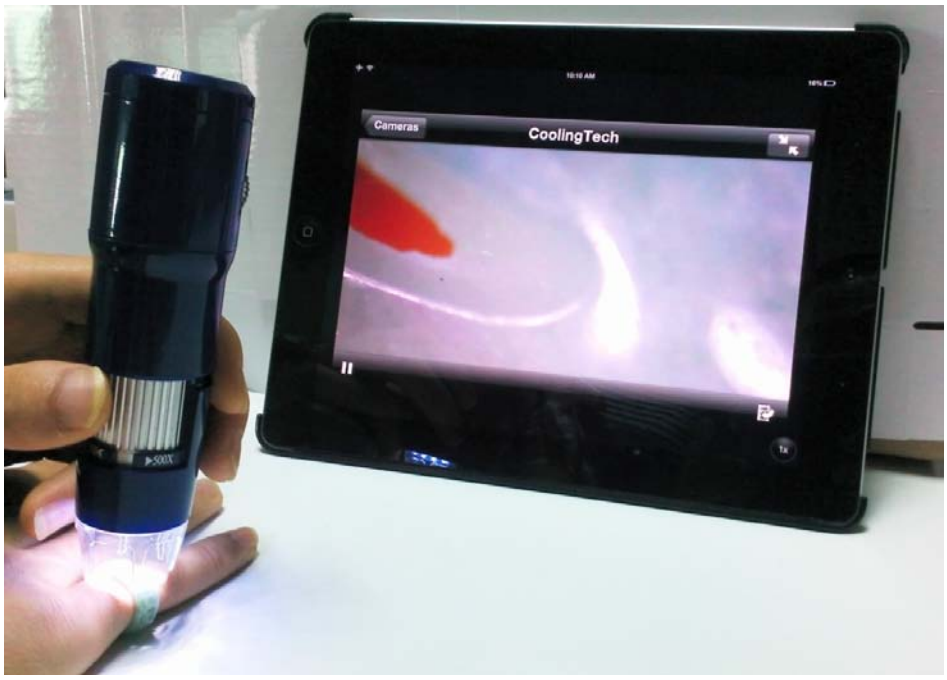
irregular , while the focus requires a good design of the microscope in order to accommodate the irregular surface of the focusing observation ; on the other hand requires a relatively large ratio ; and, because now relics exchange auctions fiery upgrades require on-site observation and identification , therefore, requires a microscope is portable and can be carried anywhere at any time microscopic observation , from the traditional bulky desktop microscope sex .

Now used widely in the market for handheld portable wireless microscope WiA500X, because it uses a compact portable design, 500 magnification , high-resolution , fast and convenient one -button camera, and a strong software support , area measurement , calculation and perimeter time taking pictures and other features ; and fast two-way radio output design , leaving observers break the constraints of time , you can achieve " on-site observation , people discuss ," also never again be wired shackles used in flexible multi- space, so traditional microscopic dwarf inferior ! good solution when the cultural identification of site identification and mobile identification of new requirements !

Handheld Portable Wireless WiFi microscope WiA500X can effectively help you in high quality antique market Amoy baby , next time do not forget to visit the antique market to bring a portable wireless WiFi microscope WiA500X, direct visual magnification 500 times compared to the naked eye , to help you eyes , wash out boutique, genuine.

Such a good product, we can to be used in the field of skin care and beauty routine it. Let us test whether the hairs can see it in my own hands!

Hey, the effect is really good, when it seems to go after Beauty bring WiA500X, their detection can spot the effect of skin care, thanks again WiA500X WiFi wireless handheld digital microscope manufacturing plant, and walking in the foreword of the whole world the technology research and development officers， loyal wish Guichang business is booming, Rijindoujin!



Handheld wireless microscope WiA500X observation jade, jewelry, jade surface, view purity

Handheld Portable Wireless WiFi microscope WiA500X, site enforcement applications:

Along with the on-site office and on-site law enforcement requirements, the need for law enforcement part of the first scene of the data collection, data collection needs more professional and efficient equipment, prior to such enforcement field, there should be a maximum of the easiest magnifying glass, and large-scale equipment has always been technology section work done in the laboratory, resulting in a certain time lag, to improve the efficiency of law enforcement agencies, a simple magnifying glass observation can not form the first time, evidence, and portable microscope replaced Loupe, details can be collected in the field, and real-time microscopic pictures and video, can form a preliminary conclusion, providing evidence for the future direction of the field of law enforcement is a groundbreaking development !

Law enforcement officers use portable wireless WiFi microscope WiA500X

Thus for portable handheld wireless WiFi microscope WiA500X, site enforcement has been cut into the CASE system's field work monitoring , forensic application of the public security system , transportation system, such as the scene of a vehicle accident analysis to provide preliminary information .

Existing application units are:

Chinese paintings Institute , Shenzhen Bao Yi Auction Co., Ltd. , Shenzhen step on the road Sambo paintings research institutions, blessing to shoot auction company , Guanshanyue Museum

Successful application equipment factory in Wuhan , Siemens, Advanced Semiconductor Materials (Shenzhen) Co., Ltd. , Hyosung Spandex (Guangdong) Co., Ltd. , Tianjin Asia Electronics Co. , Mutto photovoltaic (Suzhou) Co., Ltd. , Guangzhou godsend Advanced Materials Co., Ltd., Protek (Shanghai) Co., Ltd. , ICOT (Guangdong) ceramics Co., Ltd. , Tianshui 213 electrical Appliance Co. , Heidelberg China Limited , CKK (zipper) China , Rlink Taiwan

Meiya Color Printing Co., Ltd. in Shenzhen , Shenzhen Shi Ming Printing Co., Ltd.

Sakamoto Tian Guangya school experiments, Shenzhen Middle School, School of Foreign Languages , Shenzhen , Chengdu Medical Teachers , Nanning City, the second health and schools

Yunnan Honghe Tobacco Company , Changsha Baisha cigarette factory

Mermaid Beauty Co. , Fuhua Medical Beauty Hospital , Chengdu Su Mei Medical Beauty Hospital , Chengdu jade light cosmetic surgery hospital

Research institutes have successfully applied the Shenzhen Branch of Chinese Academy of Sciences , China Institute of Botany , Institute of Jilin ginseng , ginseng National Product Quality Supervision and Inspection Center ;

We will continue to provide the latest creation , the strongest products, best innovation, and strive to do the leading brand in the field of portable !

WiFi wireless handheld portable digital microscope , to detect new trends !

Product Specifications：

Sensor ：High-performance light-sensitive chip foreign imports

Master chip：Imports master chip DSP

Magnification ： 50X ~ 500X

Photo / video：Applications built

Auxiliary light source ：8 white LED lights

Static resolution: 640 * 480, according to their request to do zoom in and out processing (720P, 1080P resolution can be customized OEM)

Imaging Distance: manually adjustable 0 ~ 40mm, other distances can be customized OEM

Video Resolution: 640 * 480, according to their request to do zoom in and out processing

Fixed base: special base

Optical disk: includes application software and detailed instructions

Support System: IOS-based systems and Andriod Tablet PC and mobile phone systems

Power supply: Built-in 1000mA lithium battery self-protection; Support Power adapter 5V 1A power supply; support for mobile power supply

Applications ：Wireless Microscope.apk (Andriod System)

NetcamViewer (IOS System)

Dynamic frames ：QVGA 30f/s Under 600 LUX Brightness VGA 28 f/s Under 600 LUX Brightness

Illumination range: 0 ~ 30000LUX adjustable wire

Hardware Requirements: IOS system, tablet and mobile phone (such as IPad and IPhone , IPod), Andriod tablet and mobile phone systems;

Cache: 512 MB

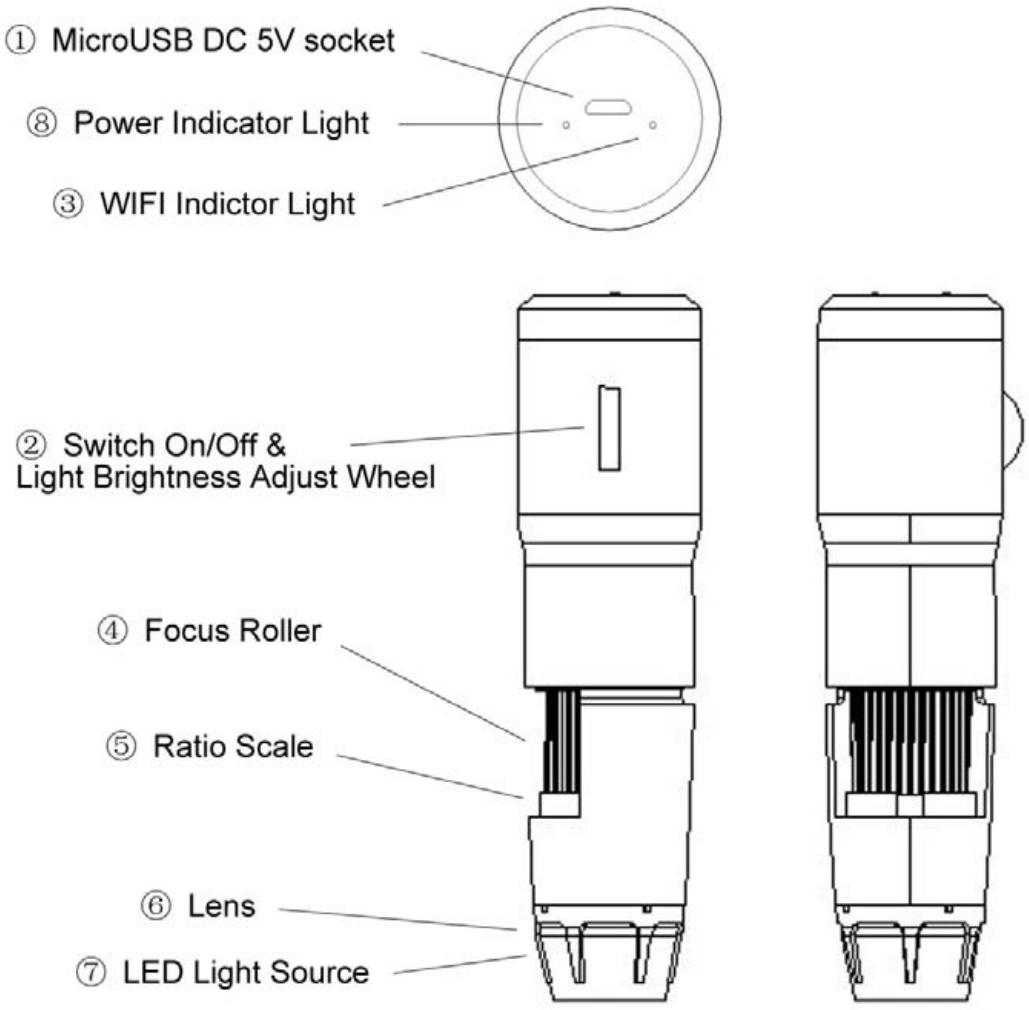
Supported languages: English, Chinese (other languages need to customize)

Color: Blue

Body size: 140mm (L) * 36.8mm (R)

Single Weight: 100g

Product Structure Components Introduction



Function Details:

① 5V Micro USB DC power socket, you can add mobile power supply, or the direct use of mobile phone charging cable Charging

② switches and dimmer knob

③ lights signaled wireless transmission

④ Focus roller

⑤ magnification

⑥ special microscope optics

⑦ auxiliary light shade

⑧ Power indicator light and Lights indicate charging status

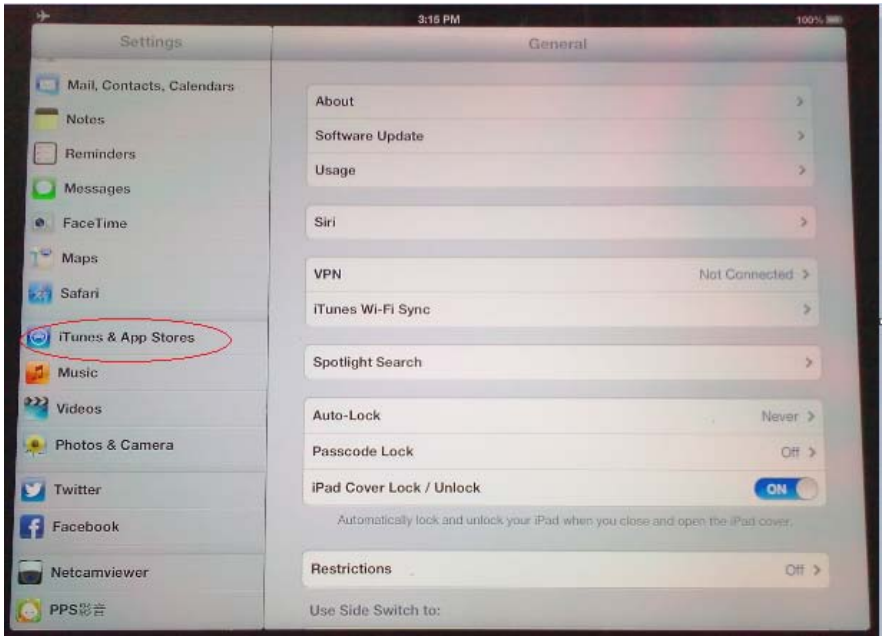
IOS system products (IPhone, IPad,IPod) Instructions for use:

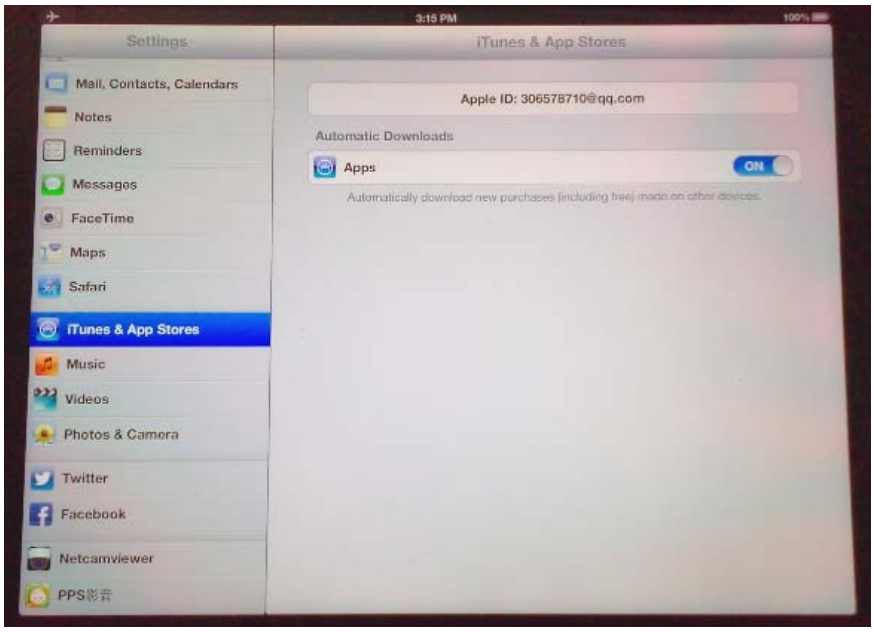
1. Turn on the power switch, the light is adjusted to the brightest

2. LED green indicator light starts to light up after 3 to 5 seconds, LED lights begin to flash, on behalf of the WiFi signal transmitting normal

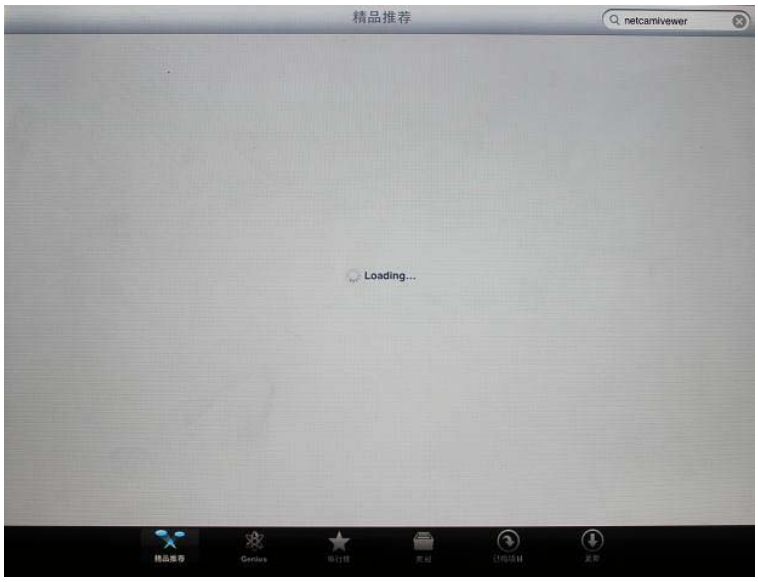
3 . for IOS System (iPad or iPhone,iPod) for the column, do the following description:

1. NetcamViewer software download





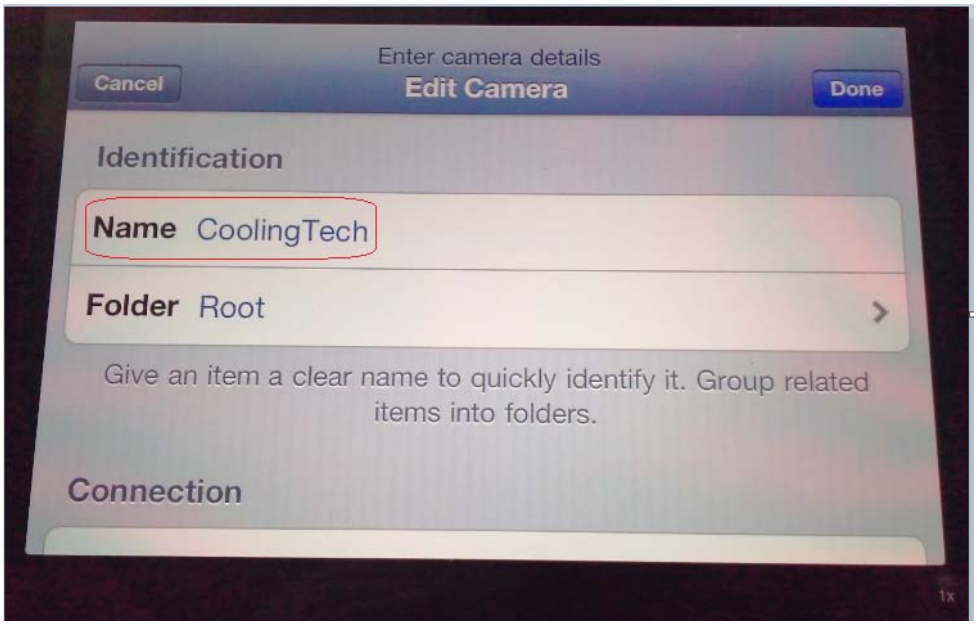
Note: This software **NetcamViewer** software is free software, no deductions.

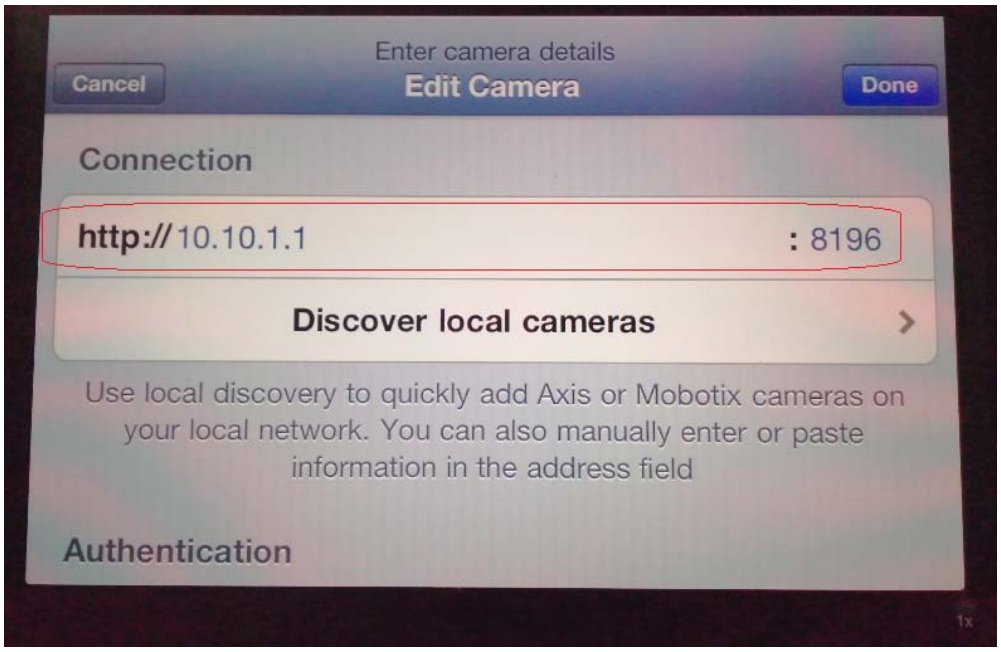


1. In the APP store, search bar enter **NetcamViewer**

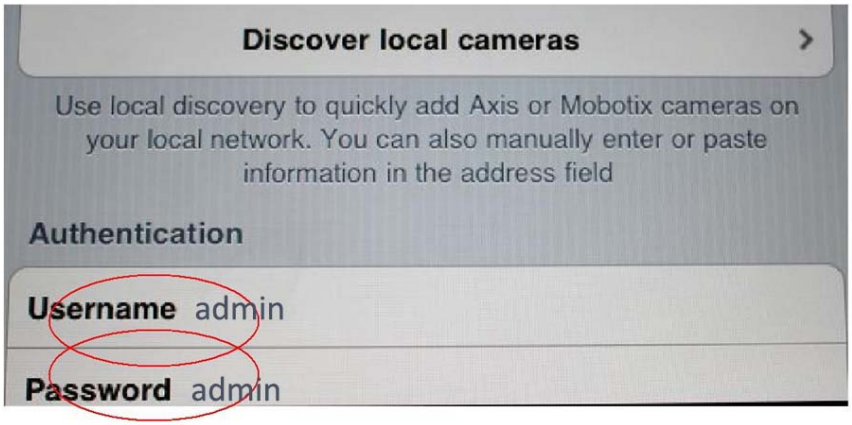
2. After installation, the application surface following icon appears

3. Click **NetcamViewer**, some parameter settings




Enter camera details
Cancel
Edit Camera
Done
Connection
http:// 10.10.1.1 : 8196
Discover local cameras
Use local discovery to quickly add Axis or Mobotix cameras on your local network. You can also manually enter or paste information in the address field
Authentication

4. Consistent with username password, enter " **admin** "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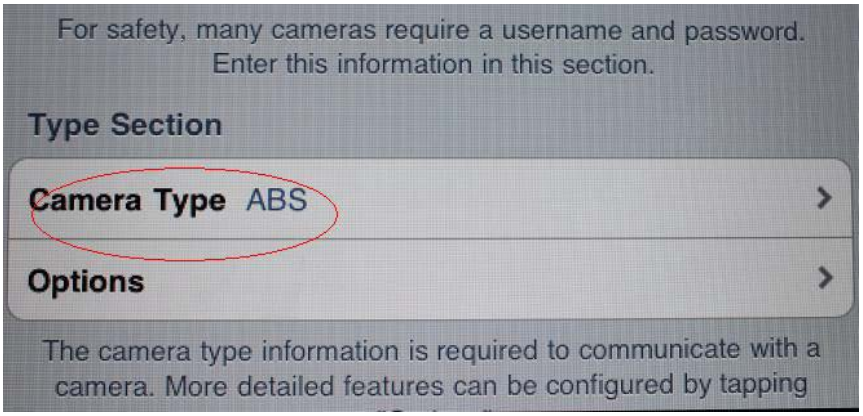
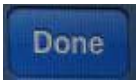
Password admin

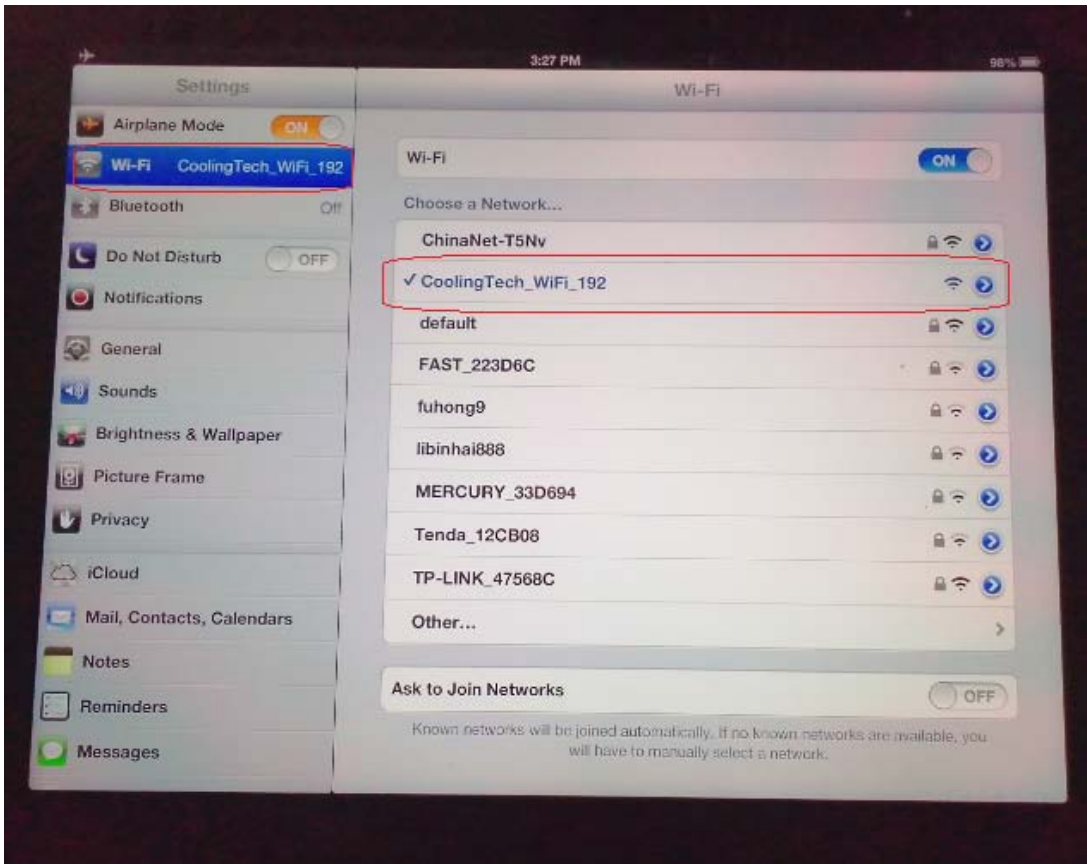

For safety, many cameras require a username and password.
Enter this information in this section.
Type Section
Camera Type ABS
Options
The camera type information is required to communicate with a
camera. More detailed features can be configured by tapping

All settings are finished, click the top right button 

Complete the setup

5. For WIFI signal connection, click **Settings**

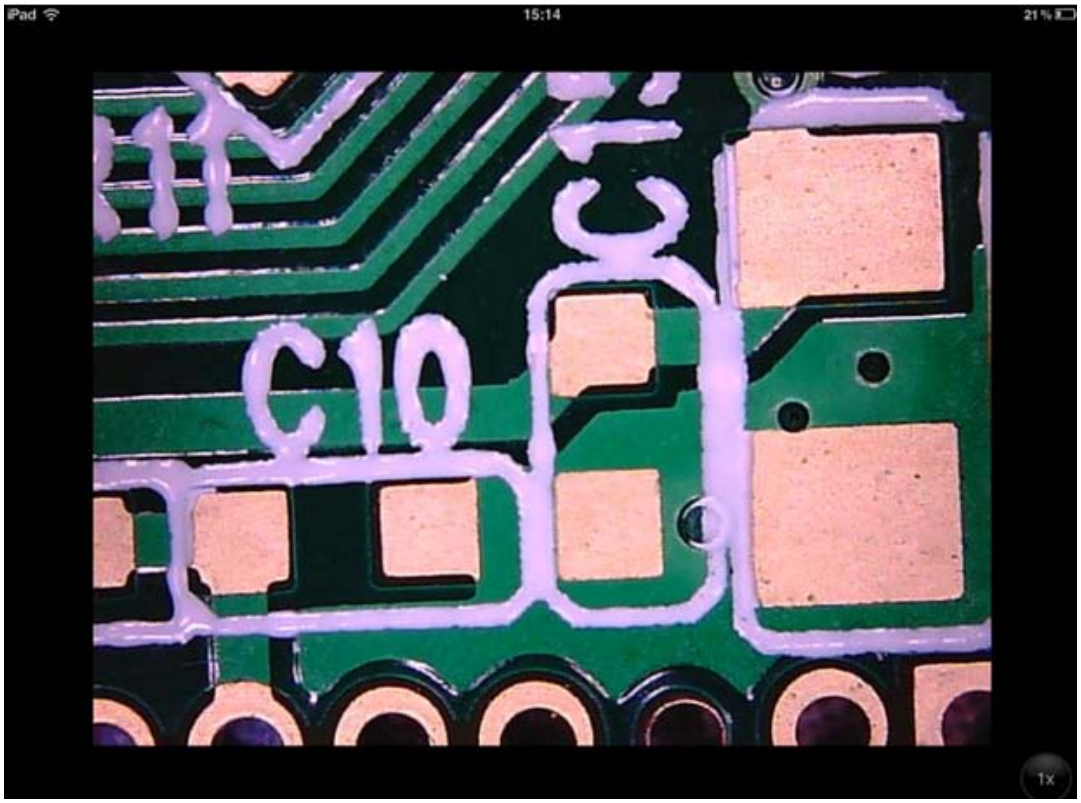
Then select the SSID in the wireless setting is " **CoolingTech_WiFi_ No.**(For Example : CoolingTech_WiFi_8 ; CoolingTech_WiFi_168 ; CoolingTech_WiFi_9998 ; "



6. When the WiFi signal connections are completed, if you do not want to download the AP software **NetcamViewer**, directly in Safari, IP address bar direct input 10.10.1.1:8196, you can then browse images directly to a web page. If you need to enter a user name and password, direct input admin

, WIFI signal is connected, click the application surface , You can normally use, as shown below:

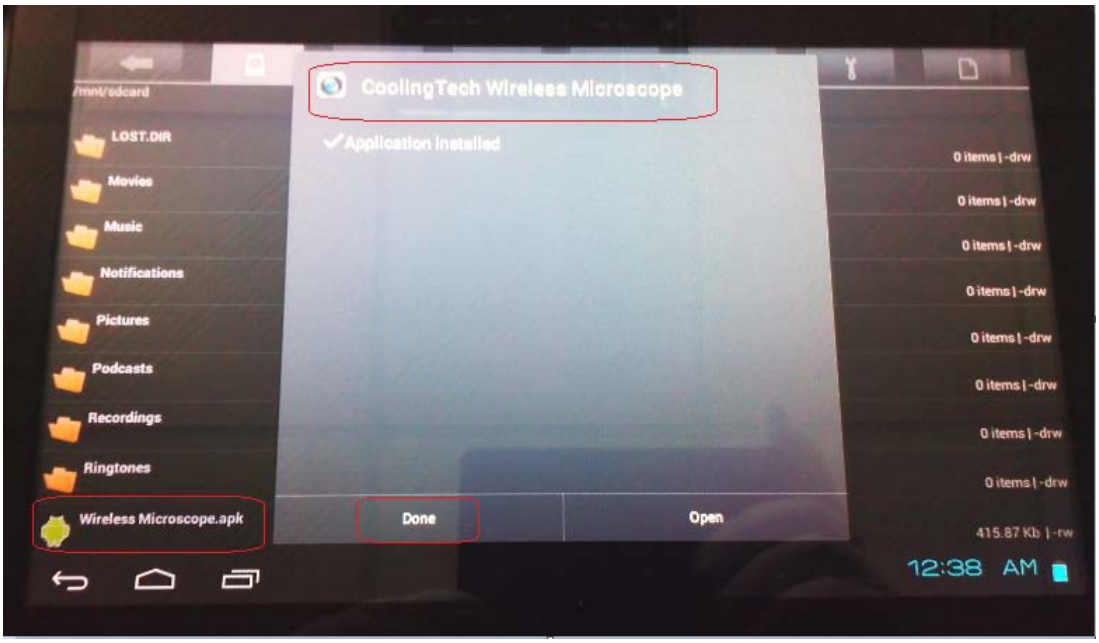
PCB board actual shooting and Measurement

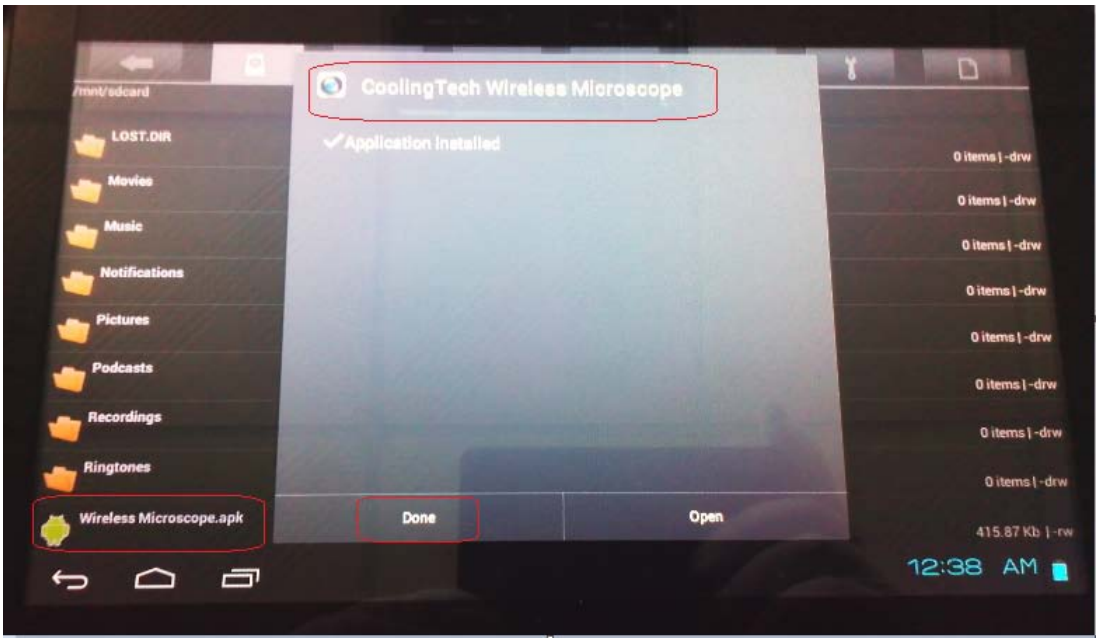


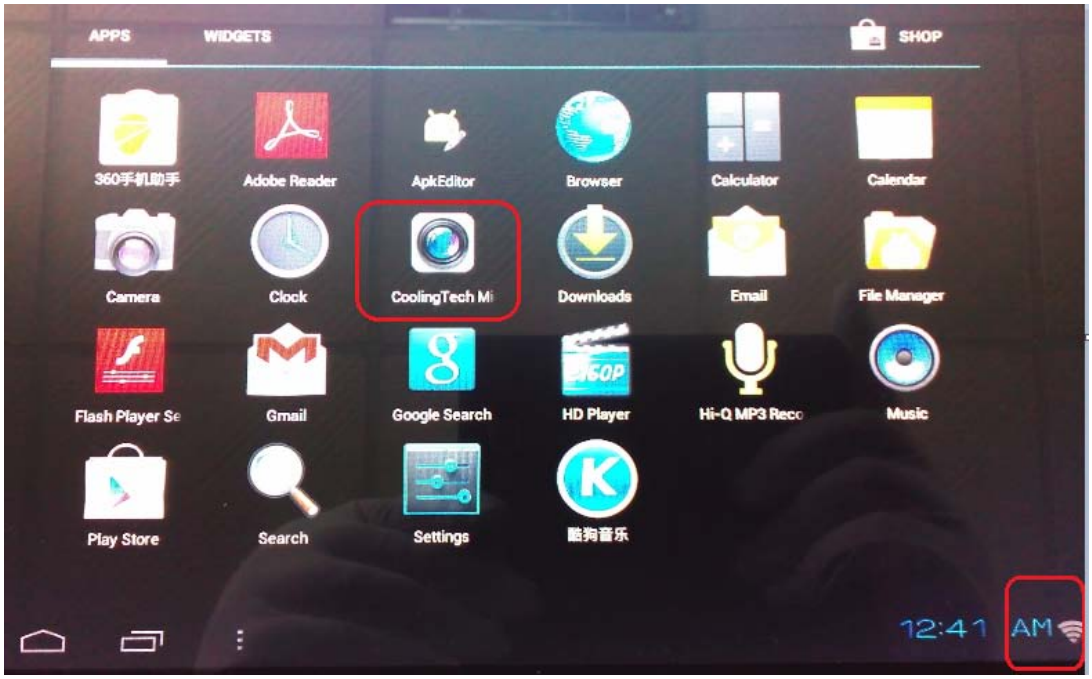
Android system products (Android Tablet PC, Android phones)

Instructions for use：

1. Keep the CD-ROM Software **Wireless Microscope.apk** copy directly to the corresponding tablet or mobile phone, and then install it, as shown：







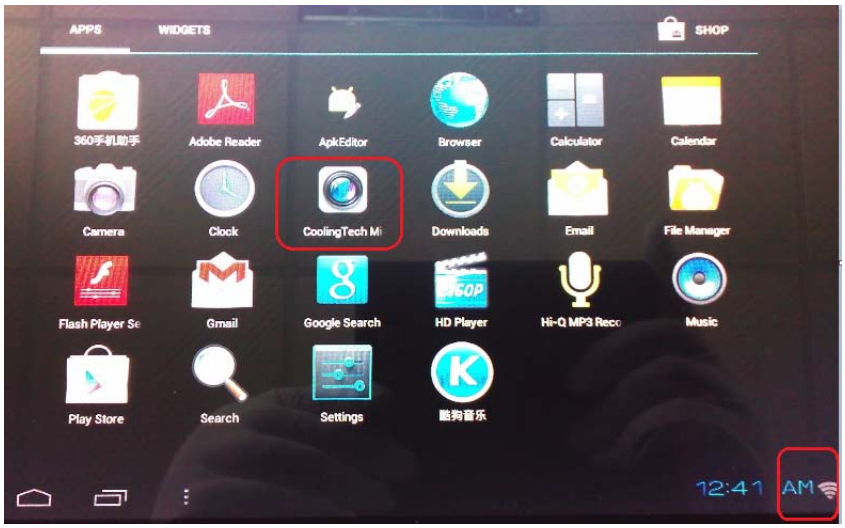
After installation is complete,
the desktop or in the Android program directory found inside **CoolingTech Microscope** Icon

Before use, first open the microscope switch, the light at maximum brightness, see the WiFi status light (green) flashes, marking signal is normal.

Then open the Android wireless settings, locate the file named "CoolingTech_WiFi_ No. (For Example: CoolingTech_WiFi_8; CoolingTech_WiFi_168; CoolingTech_WiFi_9998;" wireless signal source,

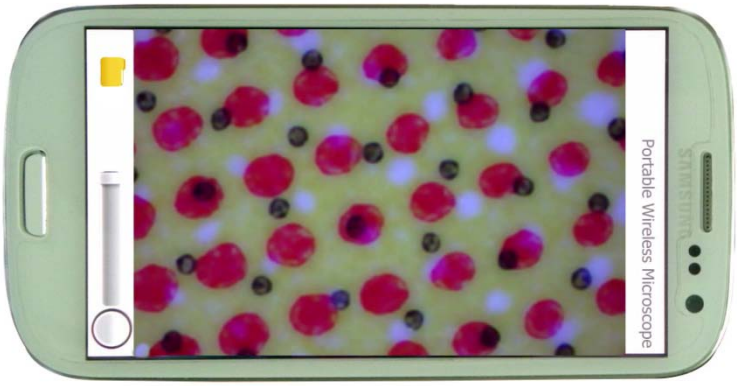
click and **Connect**, as shown below:

Then find just installed software, and open the run

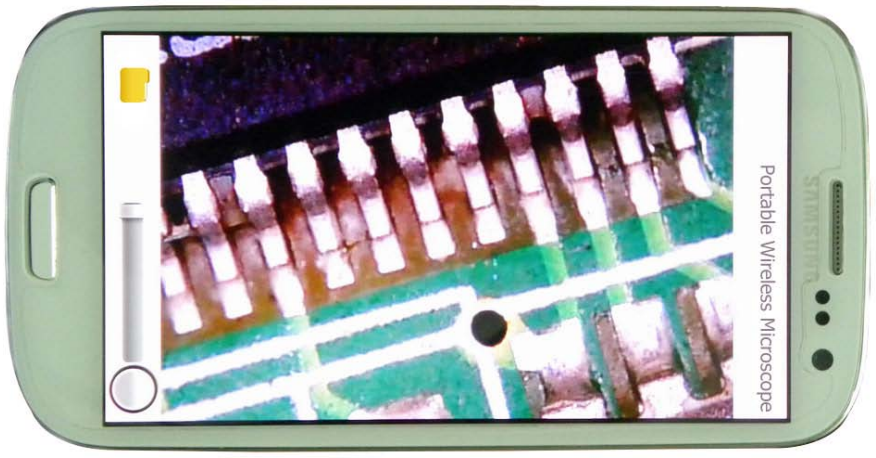


Now you can start using

Printed card photographed and Measurement



PCB board actual shooting and Measurement



Safety warnings and precautions

1. Do not disassemble the product without permission , in order to avoid electrostatic breakdown precision chip.

2. Do not use alcohol and other organic solvents to clean the product.

3. Do not touch the lens with your fingers , so as not to cause surface scratches and dirt

4. When outdoor use , avoid high temperature and high humidity environments , electronic devices shorted. This product is not waterproof , please avoid the rain and water.

5. The use of the product and the storage temperature and moderate range : -40 ° C ~ 60 ° C, relative humidity : 45% RH ~ 85% RH

6. If a foreign substance or water / liquid into the number inside the product , disconnect the power immediately and sent to the maintenance center , not themselves.

7. Equipment for reference measurement accuracy , measurement error caused by the dispute has nothing to do with the product .

8. Wireless distance within 10 ~ 60 m

9. **The first use of this product, please full charge; When charging, the red light,When the battery is full enough, red light will not light up, the purpose of this operation is to increase the battery life of wireless products.**

10. For your safety, please try not to use the product while charging at the same time, try to fully charged before use.
11. When you are outdoors trip, you can add the product to the mobile power charger

12. Please do not thunder, rain weather outdoor use this product.

More questions about this product inquiries, please contact your local dealer or CoolingTech brand distributors worldwide.

The new microscope stand with coarse and fine focus focusing function

------ **New product appeared** ! ------

More research and development of new products constantly, coming onto the market, so stay tuned !